

FACT SHEET

as required by LAC 33:IX.3109 for major LPDES facilities, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0043991; AI 19219; PER20080001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS: St. Martin Parish Government
St. Martin Parish Industrial Park Wastewater Treatment Plant
P.O. Box 9
St. Martinville, LA 70582

II. PREPARED BY: Afton J. Bessix

DATE PREPARED: April 17, 2009

III. PERMIT ACTION: reissue LPDES permit LA0043991, AI 19219; PER20080001

LPDES application received: November 13, 2008

EPA no longer has enforcement authority.

LPDES permit issued: December 1, 2003

LPDES permit expired: November 30, 2008

IV. FACILITY INFORMATION:

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Louisiana System Built Homes, St. Martin Parish Industrial Water Plant, the Louisiana Department of Agriculture & Forestry Commodities Building, and a Food & Fun Store.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located at 1114 Levert Lane in St. Martinville, St. Martin Parish.

D. The treatment facility consists of a bar screen, aerated settling basin, final clarifiers, polishing pond, disinfection in chlorine contact chamber, tertiary filter and dechlorination with sulfur dioxide.

E. Outfall 001

Discharge Location: Latitude 30° 9' 7" North
Longitude 91° 48' 46" West

Description: treated sanitary wastewater

Design Capacity: 3.0 MGD

** Since the textile factory (Fruit of the Loom) closed the facility has very minute effluent. The facility at this point does not have a discharge, nor does it anticipate one. St Martin Parish Government anticipates termination of this permit within one year.

Statement of Basis

LA0043991; AI 19219; PER20080001

Page 2

Type of Flow Measurement which the facility is currently using:
Continuous Recorder

V. RECEIVING WATERS:

The discharge is into the parish maintained main (M-17); thence into Bayou Teche; thence into Charenton Drainage and Navigational Canal in segment 060301 of the Vermilion - Teche Basin. This segment is not listed on the 303(d) List of impaired waterbodies.

The critical low flow (7Q10) of the Bayou Teche is 114 cfs.

The hardness value is 64.4 mg/l and the fifteenth percentile value for TSS is 20 mg/l.

The designated uses and degree of support for Segment 060301 of the Vermilion - Teche Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 060301	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 060301 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 060301 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

Statement of Basis

LA0043991; AI 19219; PER20080001

Page 3

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Afton J. Bessix
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 060301, Bayou Teche-Headwaters at Bayou Courtableau to Keystone Locks and Dam, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 060301 was previously listed as impaired for suspended solids, nutrients (nitrate + nitrite as N), organic enrichment/low DO, pathogen indicators, carbofuran, and phosphorus, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060301:

Total Maximum Daily Load (TMDL) for TSS, Turbidity, and Siltation for the Bayou Teche Watershed

As per the TMDL "Point source loads do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors, and dischargers of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocation for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, TSS limits will be permitted according to the current state policy.

Bayou Teche Watershed TMDL for Dissolved Oxygen Including WLAs for Twenty-two Facilities and Addressing Nutrients

As per the TMDL, "In order to meet the 5 mg/L DO criterion for the summer season, two facilities (St. Martin Parish Police Jury, St. Martinville Industrial Park WWTP and Cajun Sugar Co., Inc.) required more stringent limits along with a 25% decrease in SOD. The 25% decrease in SOD could possibly be achieved by current modeling efforts in the Boeuf/Cocodrie systems which are north of Bayou Teche. The control strategies that will be

Statement of Basis

LA0043991; AI 19219; PER20080001

Page 4

implemented for the Boeuf/Cocodrie system will help reduce SOD in Bayou Teche. The proposed permit limits for St. Martinville Industrial Park WWTP in this TMDL are as follows:

December – February:	10 mg/l CBOD ₅ / 10 mg/l NH ₃ -N / 2 mg/l minimum DO
March – November:	5 mg/l CBOD ₅ / 2 mg/l NH ₃ -N / 2 mg/l minimum DO

Therefore, this facility will be required to meet these limitations.

Bayou Teche TMDL for Fecal Coliform

As per the Bayou Teche Fecal Coliform TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will be permitted according to the current state policy.

Total Maximum Daily Load (TMDL) for the Pesticide Carbofuran in the Mermentau River and Vermilion – Teche River Basins

There are no known point source discharges of Carbofuran in the Mermentau Basin, and therefore no allocation was given to point sources. There is one point source in the Vermilion-Teche (FMC Corp. LA0064360) but they do not discharge Carbofuran. Likewise no allocation was given to point source discharges in the Vermilion - Teche River Basin.

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅				Limits are set in accordance with the <u>Bayou Teche Watershed TMDL for Dissolved Oxygen Including WLAs for Twenty-two Facilities and Addressing Nutrients</u> .
December – February	250	10 mg/l	15 mg/l	
March – November	125	5 mg/l	10 mg/l	
TSS	375	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen				Limits are set in accordance with the <u>Bayou Teche Watershed TMDL for Dissolved Oxygen Including WLAs for</u>
December – February	250	10 mg/l	20 mg/l	

Statement of Basis

LA0043991; AI 19219; PER20080001

Page 5

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
March – November	50	2 mg/l	4 mg/l	<u>Twenty-two Facilities and Addressing Nutrients.</u>
Dissolved Oxygen	---	2 mg/l	---	Limits are set in accordance with the <u>Bayou Teche Watershed TMDL for Dissolved Oxygen Including WLAs for Twenty-two Facilities and Addressing Nutrients.</u>

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

***The Color limitation has been removed from this permit since the apparel manufacturing and dyeing factory (Fruit of the Loom) has been closed.

Priority Pollutants

Effluent Characteristic	Monthly Average (lbs./day)	Daily Maximum (lbs./day)	Basis
Total Copper	1.31	3.11	Previous Permit Limit
Hexavalent Chromium	0.6	0.9	Previous Permit Limit

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

Statement of Basis

LA0043991; AI 19219; PER20080001

Page 6

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Total Residual Chlorine

If chlorination is used to achieve the limitations on Fecal Coliform Bacteria; the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. Limit set through BPJ in accordance with the previous LPDES permit.

5) Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, September 27, 2001 VERSION 4).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0043991, **Biomonitoring Section** for the organisms indicated below.

TOXICITY TESTSFREQUENCY

Acute static renewal 48-hour definitive toxicity test
using *Daphnia pulex*

once/quarter¹

Acute static renewal 48-hour definitive toxicity test
using fathead minnow (*Pimephales promelas*) ...

once/quarter¹

¹ If there are no lethal effects demonstrated after the first year of quarterly testing, the permittee may certify fulfillment of the WET testing requirements in writing to the permitting authority. If granted, the biomonitoring frequency for the test species may be reduced to not less than once per year for the less sensitive species (usually *Pimephales promelas*) and not less than twice per year for the more sensitive species (usually *Daphnia pulex*). Upon expiration of the permit, the biomonitoring frequency for both species shall revert to once per quarter until the permit is re-issued.

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 59%, 44%, 33%, 25%, and 19%. The biomonitoring critical dilution is defined as 44% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section** of the permit.

The previous permit required chronic biomonitoring, however the current practice of LDEQ is to implement the 10:1 Acute-to-Chronic Ratio if the calculated critical dilution is less than 5%. The calculated critical dilution for the permit renewal was 4.435901%. Therefore, this permit will require

Statement of Basis

LA0043991; AI 19219; PER20080001

Page 7

acute biomonitoring.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2903. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0043991: Issued: December 1, 2003
Expired: November 30, 2008

Interim Effluent Limitations beginning the effective date of the permit and lasting through three years from the effective date of the permit.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement</u>	<u>Sample</u>
			<u>Frequency</u>	<u>Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l	15 mg/l	2/week	6-Hr Composite
TSS	15 mg/l	23 mg/l	2/week	6-Hr Composite
Total Residual Chlorine	---	---	2/week	Grab
Color	---	400 (ADMI)	2/week	Grab
Fecal Coliform Colonies	200	400	2/week	Grab
pH (Standard Units)	---	---	2/week	Grab

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Daily Max.</u>	<u>Measurement</u>	<u>Sample</u>
			<u>Frequency</u>	<u>Type</u>
Copper	Report	Report	1/6 months	24-Hr Composite
Hexavalent Chromium	0.6	0.9	1/6 months	24-Hr Composite

Final Effluent Limitations beginning three years from the effective date of the permit and lasting through the expiration of the permit.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement</u>	<u>Sample</u>
			<u>Frequency</u>	<u>Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	2/week	6-Hr Composite
TSS	15 mg/l	23 mg/l	2/week	6-Hr Composite
Color	---	400 (ADMI)	2/week	Grab
Total Residual Chlorine	---	---	2/week	Grab
Fecal Coliform Colonies	200	400	2/week	Grab
pH (Standard Units)	---	---	2/week	Grab

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Daily Max.</u>	<u>Measurement</u>	<u>Sample</u>
			<u>Frequency</u>	<u>Type</u>
Copper	1.31	3.11	1/quarter	24-Hr Composite
Hexavalent Chromium	0.6	0.9	1/6 months	24-Hr Composite

The permit contains biomonitoring.

The permit contains pretreatment requirements.

Statement of Basis

LA0043991; AI 19219; PER20080001

Page 8

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning November 2006 and ending October 2008 for this facility.

Date: March 29, 2007

Inspector: LDEQ

Findings and/or Violations:

1. LA System Built Homes is the company operating there.
2. The oxidation pond has not discharged in the past year as there is no flow, according to Parish Public Works Director.
3. LA System Built Homes just recently started discharging to the parish oxidation pond, but there is still no flow.
4. St. Martin Parish should amend permit to reflect no flow.

Date: October 21, 2008

Inspector: LDEQ

Findings and/or Violations:

1. A discharge from Outfall 001 was observed.
2. The treatment system had no form of disinfection at the time of inspection.
3. There was no flow meter at Outfall 001.
4. A review of DMRs showed last reported flow was July 2005.
5. The current permit expires on November 30, 2008. As of this date, the permittee has not re-applied.
6. Water from filter backwash from plant was observed flowing out from plant into adjacent roadside ditch.
7. Lime slurry was observed in roadside ditch adjacent to the plant. It extended approximately 250 ft in ditch and was approximately 3 ft wide. These roadside ditches drain to Bayou Teche.
8. According to Cassie Alexander, the facility does not have a waste water discharge permit

B) Compliance and/or Administrative Orders

A review of the files indicates that no recent enforcement actions have been administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning November 2006 through October 2008 has revealed that there are no recent violations. The facility does not currently have a discharge and the St. Martin Parish Government anticipates termination of this permit within one year.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Statement of Basis

LA0043991; AI 19219; PER20080001

Page 9

In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 3.0 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 3.0 \text{ MGD} \times 10 \text{ mg/l} = 250 \text{ lbs/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 1.0 and 5.0 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
Flow	<u>Frequency</u>	<u>Type</u>
CBOD ₅	Continuous	Recorder
Total Suspended Solids	2/week	6 Hr. Composite
Ammonia-Nitrogen	2/week	6 Hr. Composite
Dissolved Oxygen	2/week	6 Hr. Composite
Fecal Coliform Bacteria	2/week	Grab
pH	2/week	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report each year for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

Statement of Basis

LA0043991; AI 19219; PER20080001

Page 10

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, St. Martin Parish Government, St. Martin Parish Industrial Park Wastewater Treat, November 13, 2008.